SUPER LAW GROUP, LLC

May 29, 2019

Via U.S. Mail

Andrew Wheeler, Administrator
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Deborah Szaro, EPA Region 1 Administrator
Environmental Protection Agency
5 Post Office Square - Suite 100
Boston, MA 02109-3912

William Barr, Attorney General
c/o Citizen Suit Coordinator
Environment and Natural Resources Division
Law and Policy Section
950 Pennsylvania Avenue, N.W.
Washington, DC 20530-0001

Re: *Sierra Club, Inc, et al. v. Granite Shore Power LLC et al.*

Dear: Mr. Wheeler, Ms. Szaro, and Mr. Barr,

On March 4, 2019, Sierra Club, Inc. and Conservation Law Foundation, Inc. filed a complaint against Granite Shore Power LLC, GSP Merrimack LLC, and Public Service Company of New Hampshire d/b/a Eversource Energy in the United States District Court for the District of New Hampshire. In accordance with 33 U.S.C. 1365(c)(3) and 40 CFR 135.4, we are providing you with a copy of the complaint.

Respectfully,

Reed Super
Attorney for Plaintiffs

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UNITED STATES DISTRICT COURT
DISTRICT OF NEW HAMPSHIRE

SIERRA CLUB, INC. and CONSERVATION LAW FOUNDATION, INC., Plaintiffs, v. GRANITE SHORE POWER LLC; GSP MERRIMACK LLC; and PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE d/b/a EVERSOURCE ENERGY, Defendants.	Case No. _____ **COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF AND CIVIL PENALTIES** (Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 to 1387)

Plaintiffs Sierra Club Inc. and Conservation Law Foundation, Inc., by and through their counsel, hereby allege:

I.

INTRODUCTION

1. This is a civil suit brought under the citizen suit enforcement provisions of the Federal Water Pollution Control Act, 33 U.S.C. § 1251, *et seq.* (the "Clean Water Act," "the Act," or "CWA") to address and abate ongoing and continuous violations of the Act by Granite Shore Power LLC, GSP Merrimack LLC, and Public Service Company of New Hampshire d/b/a Eversource Energy ("Defendants") as the owners and operators of the Merrimack Station, a power plant on the banks of the Merrimack River in Bow, New Hampshire.

2. The Merrimack Station (the "Station") is one of New England's oldest and most polluting power plants. The Station is located on approximately 230 acres of land in Bow, New

Hampshire. The Station sits on the western bank of the Merrimack River in the middle of a 5.8-mile stretch known as the Hooksett Pool. The Hooksett Pool is a relatively shallow part of the river, ranging in depth from six to ten feet, bounded by the upstream Garvin's Falls Dam and the downstream Hooksett Dam.

3. Power plants like the Station, that utilize "once-through" cooling systems, are capable of heating large volumes of water to very high temperatures. These facilities withdraw water from a water body, dump waste heat into it, and then discharge the heated water (or "thermal effluent") to a receiving water body. These heated discharges can have a significant effect on the temperature of the receiving water, which in turn can cause great ecological harm.

4. For decades, the Station has drawn about 287 million gallons per day (design flow) of cooling water from the Merrimack River and has discharged a similar quantity of thermal effluent back into the river, causing significant ecological harm to the river. The Station also kills, maims, or otherwise harms fish, fish larvae, and other aquatic organisms that become trapped on the plant's intake screens, or are pulled into the existing once-through cooling system.

5. The Sierra Club, Inc. and Conservation Law Foundation, Inc. ("CLF") (collectively "Plaintiffs") bring this citizen suit against Defendants because the Station has for decades discharged heated wastewater in a manner that is deleterious to the environmental and ecological health of the Merrimack River, and not in compliance with the National Pollutant Discharge Elimination System ("NPDES") permit for the Station (Permit NH0001465) (the

"NPDES Permit"), which went into effect in 1992,[1] and section 301(a) and section 402 of the CWA. *See* 33 U.S.C. §§ 1311(a), 1342.

II.

JURISDICTION AND VENUE

6. This Court has subject matter jurisdiction over this action pursuant to section 505(a)(1) of the CWA, 33 U.S.C. § 1365(a)(1), and 28 U.S.C. § 1331 (an action arising under the laws of the United States).

7. Plaintiff has complied with the notice requirements under section 505(b)(1) of the CWA, 33 U.S.C. § 1365(b)(1).

8. On November 1, 2018, Plaintiffs provided notice of Defendants' violations of the Act, and of their intention to file suit against Defendants, to: Defendants; the Administrator of the United States Environmental Protection Agency ("EPA"); and the Administrator of EPA Region I, as required by the Act, 33 U.S.C. § 1365(b)(1)(A), and the corresponding regulations at 40 C.F.R. §§ 135.1 to 135.3. A true and correct copy of Plaintiffs' notice letter is attached as Exhibit B and is incorporated by reference, including all the allegations therein.

9. On December 21, 2018, Plaintiffs provided notice of Defendants' violations of the Act and of their intention to file suit against Defendants to the commissioner of the New Hampshire Department of Environmental Services, who is the chief administrative officer of the water pollution control agency for the State of New Hampshire, where the violations alleged in this complaint are occurring. *See* December 21, 2018 letter to New Hampshire Department of

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[1] Authorization to Discharge Under the National Pollutant Discharge Elimination System, Merrimack Station (Permit No. NH0001465) (June 25, 1992). A true and correct copy of the NPDES Permit is attached as Exhibit A and is incorporated by reference.

Environmental Services in Exhibit B.

10. More than sixty days have passed since the notice letter was served on Defendants, the State of New Hampshire, and the EPA.

11. Neither the United States nor the state has commenced or is diligently prosecuting a civil or criminal action to redress the violations alleged in this complaint. *See* CWA § 505(b)(1)(B), 33 U.S.C. § 1365(b)(1)(B).

12. This action is not barred by any prior administrative penalty under section 309(g) of the Act, 33 U.S.C. § 1319(g).

13. Venue is proper in the District of New Hampshire pursuant to Section 505(c)(1) of the CWA, 33 U.S.C. § 1365(c)(1), and 28 U.S.C. § 1391(b)(2) because the source of the violations complained of is located, and the acts and omissions giving rise to the claims occurred, within this judicial district.

III.

PARTIES

14. Plaintiff Sierra Club was founded in 1892 and is the nation's oldest grass-roots environmental organization. The Sierra Club is a national nonprofit organization that is incorporated in California and has its headquarters in Oakland, California. It has more than eight hundred thousand members, including thousands of members in New Hampshire. The Sierra Club is dedicated to the protection and preservation of the natural and human environment, including protecting threatened and endangered species and their habitat. The Sierra Club's purpose is to explore, enjoy and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystem and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments.

15. Plaintiff Conservation Law Foundation ("CLF") was founded in 1966 and is New England's oldest region-wide environmental advocacy organization. CLF is a nonprofit, member-supported organization with offices in Boston, Massachusetts; Concord, New Hampshire; Montpelier, Vermont; Portland, Maine; and Providence, Rhode Island, and uses the law, science, and the market to protect New England's environment for the benefit of all people. CLF has approximately 5,000 members, including over 500 members in New Hampshire. It has a long history of working to protect the health of New England's and New Hampshire's water resources.

16. Sierra Club's and CLF's members use, recreate upon, and enjoy the Merrimack River, which Defendants continue to unlawfully pollute. Sierra Club's and CLF's members care very deeply about water quality in the Merrimack River, and water quality in the Merrimack River directly affects the health, recreational, aesthetic, commercial, and environmental interests of the Plaintiffs' members. The interests of Plaintiffs are being, and will be, adversely affected by Defendants' failure to comply with the requirements of the Clean Water Act.

17. The relief sought herein will redress the harms to Plaintiffs and their members caused by Defendants' activities. Continuing commission of the acts and omissions alleged herein will irreparably harm Plaintiffs and their members, for which harm they have no plain, speedy or adequate remedy at law.

18. Plaintiffs are informed and believe, and thereupon allege, that Defendant Granite Shore Power LLC is a limited liability company formed under the laws of the State of Delaware, which owns and operates the Station in Bow, New Hampshire.

19. Plaintiffs are informed and believe, and thereupon allege, that Defendant GSP Merrimack LLC is a limited liability company formed under the laws of the State of Delaware,

which owns and operates the Station in Bow, New Hampshire.

20. Plaintiffs are informed and believe, and thereupon allege, that Defendant Public Service Company of New Hampshire d/b/a Eversource Energy is a corporation incorporated under the laws of the State of New Hampshire, which owned and operated the Station in Bow, New Hampshire until about January 10, 2018.

IV.

STATUTORY AND REGULATORY BACKGROUND

The Clean Water Act

21. Congress passed the Clean Water Act in 1972 "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The CWA's goal is to eliminate all discharges of pollution into navigable waters. To that end, the CWA prohibits point sources from discharging pollutants into waters of the United States, except in compliance with a NPDES permit. *See* 33 U.S.C. §§ 1311(a), 1342(a).

22. Heat is defined as a pollutant under the Clean Water Act. *See* 33 U.S.C. § 1362(6).

23. NPDES permit limits for thermal discharges must, at a minimum, satisfy federal technology-based requirements, as well as any more stringent requirements based on applicable state water quality standards. *See* 33 U.S.C. §§ 1311(b)(1)(C), 1311(b)(2)(A), 1312, 1342(a).

24. Section 316(a) of the CWA provides that EPA may, under certain circumstances, approve alternative thermal discharge limitations, which vary from the requirements cited above. Section 316(a) authorizes the permitting agency to impose less stringent thermal discharge limits if the permittee can demonstrate that "any effluent limitation proposed for the control of the thermal component of any discharges . . . will require effluent limitations more stringent than

necessary to assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife." 33 U.S.C. § 1326(a); 40 C.F.R. § 125.70.

The Station's NPDES Permit

25. The Station's NPDES permit, which EPA issued in 1992, includes alternative thermal discharge limitations under section 316(a) that permit the Station to operate without complying with numeric effluent limitations on thermal discharges that satisfy federal technology-based requirements.

26. Instead, the NPDES Permit specifies that discharges shall not violate any applicable water quality standards, which includes those promulgated by the State of New Hampshire. *See* NPDES Permit, Exhibit A, at I.A.1.b (p. 2).

27. The NPDES Permit also requires compliance with the following effluent limitations:

> The combined thermal plumes for the station shall; (a) not block the zone of fish passage, (b) not change the balanced indigenous population of the receiving water, and (c) have minimal contact with the surrounding shorelines.

NPDES Permit at Part I.A.1.g (p. 3).

28. Further, the NPDES Permit requires continuous monitoring of temperature and dissolved oxygen. *See* NPDES Permit at I.A.11.a. (p. 16) & 12.a, b (p. 17).

29. With respect to temperature, the NPDES permit requires that:

> Continuous river surface temperature monitoring in the vicinity of the Merrimack Generating Station shall be conducted on the following basis. Open-river surface water temperatures will be continuously monitored at control Station N-10, effluent discharge station Zero, and mixing zone Station S-4 . . . . The discharge Station Zero temperature monitoring probe will remain in place and in operation year round.

NPDES Permit at Part I.A11.a (p. 16).

30. With respect to dissolved oxygen, the NPDES permit requires continuous

monitoring: "[t]he permittee shall continuously monitor the dissolved oxygen content of both an ambient river control station and the circulating water discharge. . . ." NPDES Permit at Part I.A.12.b (p. 17).

31. The NPDES Permit requires that all monitoring data be submitted annually to the EPA regional administrator, as well as other federal and state agencies: "All biological and hydrological monitoring program data shall be submitted to the NHDES, NHF&GD, USF&WS, and the Regional Administrator by December 31 of the following year." NPDES Permit at Part I.A.13 (p. 17).

New Hampshire State Water Quality Standards

32. The NPDES permit provides that the Station's discharges "shall not jeopardize any Class B use of the Merrimack River and shall not violate applicable water quality standards." NPDES Permit at Part I.A.1.b (p. 2).

33. For Class B waters, New Hampshire state law dictates that: "[t]here shall be no disposal of sewage or waste into said waters . . . [where] such disposal of sewage or waste [would] be inimical to aquatic life or to the maintenance of aquatic life in said receiving waters . . . ." N.H. Rev. Stat. Ann. § 485-A:8(II).

34. In addition, "[a]ny stream temperature increase associated with the discharge of treated sewage, waste or cooling water . . . shall not be such as to appreciably interfere with the uses assigned to this class. The waters of this classification shall be considered as being acceptable for fishing, swimming and other recreational purposes and, after adequate treatment, for use as water supplies." *Id.*

35. More generally, the New Hampshire water quality regulations mandate that: "[a]ll surface waters shall provide, wherever attainable, for the protection and propagation of fish,

shellfish and wildlife, and for recreation in and on the surface waters." N.H. Code R. Env-Wq § 1703.01(c).

36. The regulations also dictate that: "[a]ll surface waters shall be restored to meet the water quality criteria for their designated classification including existing and designated uses, and to maintain the chemical, physical, and biological integrity of surface waters." *Id.* § 1703.01(b).

37. The "biological integrity" of surface waters means:

> the ability of an aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of similar natural habitats of a region.

Id. § 1702.08.

38. New Hampshire water quality standard regulations specify a water quality criterion for "Biological and Aquatic Community Integrity:"

> (a) The surface waters shall support and maintain a balanced, integrated, and adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of similar natural habitats of a region.
>
> (b) Differences from naturally occurring conditions shall be limited to non-detrimental differences in community structure and function.

Id. § 1703.19(a), (b).

39. In sum, New Hampshire's narrative water quality standards mean that pollutant discharges to a Class B water body, such as the Hooksett Pool, may not harm aquatic life (*i.e.*, "jeopardize," "be inimical to," or contribute to "detrimental differences" from naturally occurring conditions) or undermine a water body's ability to support and maintain what would otherwise be the natural, balanced community of aquatic life in that water body with a species composition, diversity, and functional organization comparable to that of similar natural habitats of the region.

40. Additionally, the Station's thermal discharges must not result in in-stream temperatures that "appreciably interfere" with fishing or other Class B uses in the Hooksett Pool.

41. Finally, New Hampshire has a numeric water quality standard for dissolved oxygen which requires in Class B waters, such as the Merrimack River, an average dissolved oxygen concentration that is 75% of the saturation concentration, and an instantaneous standard of 5.0 mg/L or greater at all times. *See* N.H. Code R. Env-Wq § 1703.07(b).

CWA Citizen Enforcement Suits

42. Under section 505(a)(1) of the CWA, any citizen may commence a civil action in federal court on his or her own behalf against any person who is alleged to be in violation of an "effluent standard or limitation" under the CWA. 33 U.S.C. § 1365(a)(1).

43. The "effluent standard[s] or limitation[s]" that can be enforced in a citizen suit include any "permit or a permit condition issued under section 402" of the CWA. CWA § 505(f), 33 U.S.C. § 1365(f)(7).

44. Declaratory relief in such cases is authorized by 28 U.S.C. § 2201–02 (power to issue declaratory relief in case of actual controversy and further necessary relief based on such a declaration).

45. Injunctive relief is authorized by section 505(a) of the Act, 33 U.S.C. § 1365(a).

46. Violators of the Act are also subject to civil penalties of up to $53,484 per day, per violation. *See* 33 U.S.C. §§ 1319(d) and 1365(a) and 40 C.F.R. §§ 19.1–19.4.

47. Under the CWA, a prevailing or substantially prevailing party may be awarded litigation costs including reasonable attorney and expert witness fees. *See* 33 U.S.C. § 1365(d).

V.

FACTS

48. The Station sits on the western bank of the Merrimack River, in the middle of a 5.8-mile stretch of the river referred to as the Hooksett Pool.

49. The Hooksett Pool is a shallow part of the river, ranging in depth from six to ten feet, bounded by the upstream Garvin's Falls Dam and the downstream Hooksett Dam.

50. The Station discharges thermal effluent through a discharge canal into the Hooksett Pool at temperatures above natural ambient levels.

51. The Station's thermal discharges frequently reach temperatures in excess of 90° Fahrenheit at downstream monitoring points, well in excess of what is tolerable for native species.

52. Due to the relatively shallow depths in the Hooksett Pool, the thermal plume can extend far and wide, with elevated water temperatures observed at the Hooksett Dam nearly three miles downstream.

53. The thermal plume is most expansive in the warmer months when, during low-flow conditions, the Station may divert up to sixty-two percent of the Merrimack River flow to cool the Station.

54. High spring and summer temperatures in the Hooksett Pool surpass important survival thresholds for native fish species, including American Shad and Yellow Perch, as well as for native freshwater mussels.

55. Under such conditions the thermal plume blocks the zone of passage for these and other fish species in the river.

56. Temperature data from summer months show completely-mixed lower Hooksett Pool waters can be 3.6 ° to 7.2° Fahrenheit warmer, and at times more than 10 ° Fahrenheit warmer, than upstream waters.

57. Elevated water temperatures in the entire lower reach of the Hooksett Pool show that there is a shoreline-to-shoreline heat plume.

58. During summer months thermal discharges from the Station cause stratification of the water and consequent low dissolved oxygen in the underlying strata.

59. In the cooler months, warm temperatures in the Station's discharges harm native fish species by negatively affecting development and reproduction.

60. Further, the Station's abrupt shutdowns in the colder seasons cause "cold shocks," *i.e.*, a relatively rapid reduction in water temperatures, which can lead to the physiological impairment or death of fish in the river.

61. The Station's operations have contributed to a nearly 95 percent decline in resident fish species in the Hooksett Pool, while allowing for certain harmful, non-native, heat tolerant species to upset the ecological balance in the river.

62. The decline in native fish species, coupled with the presence of a strong population of non-native Asian clams in the area affected by the thermal plume further demonstrates that the plume is changing the balanced indigenous population in the Hooksett Pool by creating species composition, diversity, and functional organization that is not comparable to that of similar natural habitats in the region.

63. EPA has found that "the evidence as a whole indicates that Merrimack Station's thermal discharge has caused, or contributed to, appreciable harm to Hooksett Pool's balanced, indigenous population of fish." *See* EPA - New England Clean Water Act NPDES Permitting

Determinations for the Thermal Discharge and Cooling Water Intake Structures at Merrimack Station in Bow, New Hampshire NPDES Permit No. NH 0001465 at viii and 121, *available at* https://www3.epa.gov/region1/npdes/merrimackstation/pdfs/MerrimackStationAttachD.pdf.

64. EPA has also found that the Station's thermal discharges do not satisfy New Hampshire water quality standards and have "indeed been inimical to aquatic life in the Hooksett Pool." *Id.* at 178.

65. Since the NDPES Permit went into effect, the Station has not submitted continuous thermal monitoring or dissolved oxygen monitoring data to the agencies listed in Part I.A.13 of the NDPES permit.

66. On February 24, 2019, the New Hampshire Union Leader published an article based on an interview with Jim Andrews, president of Defendant Granite Shore Power LLC. The paper reported that the Station will continue to operate well beyond this calendar year, and for the foreseeable future.

VI.

CLAIMS FOR RELIEF

FIRST CAUSE OF ACTION

Blockage of the Zone of Fish Passage
(Violations of Permit Conditions and the Act, 33 U.S.C. §§ 1311, 1342)
As Against Defendants Granite Shore Power LLC and GSP Merrimack LLC

67. Plaintiffs reallege and incorporate all preceding paragraphs, as if fully set forth herein.

68. The NPDES Permit requires that: "[t]he combined thermal plumes for the station shall . . . not block the zone of fish passage . . . ." NPDES Permit at Part I.A.1.g (p. 3).

69. Plaintiffs are informed and believe, and thereupon allege, that Defendants'

operation of the Station has caused, and continues to cause, thermal plumes that block the zone of fish passage in the Merrimack River.

70. Violations of the NPDES Permit requirement that the thermal plume not block the zone of fish passage have occurred and continue to occur, at least, on all occasions that the Station's thermal plume causes temperatures in the River, during spring and summer months, to exceed fish tolerance thresholds for any life stage of any native species, and each such occasion is a violation or violations of the NPDES Permit and section 301(a) and section 402 of the Act, 33 U.S.C. §§ 1311(a), 1342.

71. Continuing commission of the acts and omissions alleged herein irreparably harms water quality, Plaintiffs, and their members, for which harm Plaintiffs have no plain, speedy, or adequate remedy at law.

72. Wherefore Plaintiffs pray for relief as hereinafter set forth.

SECOND CAUSE OF ACTION

Change to the Balanced and Indigenous Population of the Merrimack River (Violations of Permit Conditions and the Act, 33 U.S.C. §§ 1311, 1342) As Against Defendants Granite Shore Power LLC and GSP Merrimack LLC

73. Plaintiffs reallege and incorporate all preceding paragraphs, as if fully set forth herein.

74. The NPDES Permit requires that: "[t]he combined thermal plumes for the station shall . . . not change the balanced indigenous population of the receiving water. . . ." NPDES Permit at Part I.A.1.g (p. 3).

75. Plaintiffs are informed and believe, and thereupon allege, that Defendants' operation of the Station has caused, and continues to cause, a thermal plume that has changed, and continues to change, the balanced indigenous population of the Merrimack River.

76. Violations of the NPDES Permit requirement that the thermal plume shall not change the balanced indigenous population of the Merrimack River have occurred continuously on all days within the statutory period, and each day is a violation of section 301(a) and section 402 of the Act, 33 U.S.C. §§ 1311(a), 1342.

77. Continuing commission of the acts and omissions alleged herein irreparably harms water quality, Plaintiffs, and their members, for which harm Plaintiffs have no plain, speedy, or adequate remedy at law.

78. Wherefore Plaintiffs pray for relief as hereinafter set forth.

THIRD CAUSE OF ACTION

Contact with the Surrounding Shorelines
(Violations of Permit Conditions and the Act, 33 U.S.C. §§ 1311, 1342)
As Against Defendants Granite Shore Power LLC and GSP Merrimack LLC

79. Plaintiffs reallege and incorporate all preceding paragraphs, as if fully set forth herein.

80. The NPDES Permit requires that: "[t]he combined thermal plumes for the station shall . . . have minimal contact with the surrounding shorelines." NPDES Permit at Part I.A.1.g (p. 3).

81. Plaintiffs are informed and believe, and thereupon allege, that Defendants' operation of the Station has caused, and continues to cause, a thermal plume that has more than minimal contact with the surrounding shorelines.

82. Violations of the NPDES Permit requirement that the Station's thermal plume have only minimal contact with the surrounding shorelines have occurred and continue to occur on all days when the thermal plume from the Station extends from shoreline to shoreline or for thousands of feet down the near shore of the Merrimack River. Such dates of violation occur

principally during summer months and each such day is a violation of the NPDES Permit and section 301(a) and section 402 of the Act, 33 U.S.C. §§ 1311(a), 1342.

83. Continuing commission of the acts and omissions alleged herein irreparably harms water quality, Plaintiffs, and their members, for which harm Plaintiffs have no plain, speedy, or adequate remedy at law.

84. Wherefore Plaintiffs pray for relief as hereinafter set forth.

FOURTH CAUSE OF ACTION

Violation of New Hampshire Water Quality Standards
(Violations of Permit Conditions and the Act, 33 U.S.C. §§ 1311, 1342)
As Against Defendants Granite Shore Power LLC and GSP Merrimack LLC

85. Plaintiffs reallege and incorporate all preceding paragraphs, as if fully set forth herein.

86. The NPDES Permit requires that the Station's discharges "shall not jeopardize any Class B use of the Merrimack River and shall not violate applicable water quality standards." NPDES Permit at Part I.A.1.b (p. 2).

87. Plaintiffs are informed and believe, and thereupon allege, that Defendants' operation of the Station has jeopardized, and continues to jeopardize, a Class B use of the Merrimack River, *i.e.*, fishing.

88. Plaintiffs are informed and believe, and thereupon allege, that Defendants' operation of the Station and their thermal discharges have caused, and continue to cause, violations of applicable water quality standards set forth or referenced in paragraphs 32 to 41, above, due to the impacts described in paragraphs 48 to 65, above, and pages 6 to 9 of Plaintiffs' notice of intent to sue, attached hereto as Exhibit B.

89. Violations of the NPDES Permit requirements that the Station shall not jeopardize

any Class B use of the Merrimack River and shall not violate applicable water quality standards have occurred continuously on all days within the statutory period, and each day is a violation of the NPDES Permit and Section 301(a) and Section 402 of the Act, 33 U.S.C. §§ 1311(a), 1342.

90. Continuing commission of the acts and omissions alleged herein irreparably harms water quality, Plaintiffs and their members, for which harm Plaintiffs have no plain, speedy, or adequate remedy at law.

91. Wherefore Plaintiffs pray for relief as hereinafter set forth.

FIFTH CAUSE OF ACTION

Failure to Monitor and Report
(Violations of Permit Conditions and the Act, 33 U.S.C. §§ 1311, 1342)
As Against All Defendants

92. Plaintiffs reallege and incorporate all preceding paragraphs, as if fully set forth herein.

93. The NPDES Permit requires continuous river surface temperature monitoring:

> Continuous river surface temperature monitoring in the vicinity of the Merrimack Generating Station shall be conducted on the following basis. Open-river surface water temperatures will be continuously monitored at control Station N-10, effluent discharge station Zero, and mixing zone Station S-4 . . . . The discharge Station Zero temperature monitoring probe will remain in place and in operation year round. . . . Monitoring program data shall be reported in accordance with Paragraph 13, below.

NPDES Permit at Part I.A.11.a (p. 16).

94. The NPDES permit also requires continuous monitoring of dissolved oxygen: "The permittee shall continuously monitor the dissolved oxygen content of both an ambient river control station and the circulating water discharge. . . ." NPDES Permit at Part I.A.12.b (p. 17).

95. The NPDES permit also requires that the continuous monitoring results be reported to government authorities periodically:

> All biological and hydrological monitoring program data shall be submitted to the NHDES, NHF&GD, USF&WS, and the Regional Administrator by December 31 of the following year.

NPDES Permit at Part I.A.13 (p. 17).

96. Plaintiffs are informed and believe, and thereupon allege, that Defendants have never, since the NPDES permit went in to effect, submitted continuous temperature or dissolved oxygen monitoring data to EPA and the other above-referenced agencies identified in Part I.A.13 of the NPDES Permit as required by the permit.

97. Plaintiffs are informed and believe, and thereupon allege, that Defendants collected continuous temperature and dissolved oxygen monitoring data and are in possession of such data, but have not reported such data to the agencies as required by Part I.A.13 of the NPDES Permit.

98. Violations of the NPDES Permit's monitoring and reporting requirements have occurred, continue to occur, and constitute continuing violations of the NPDES Permit and section 301(a) and section 402 of the Act, 33 U.S.C. §§ 1311(a), 1342.

99. Continuing commission of the acts and omissions alleged herein irreparably harms water quality, Plaintiffs, and their members, for which harm Plaintiffs have no plain, speedy, or adequate remedy at law.

100. Wherefore Plaintiffs pray for relief as hereinafter set forth.

VII.

PRAYER FOR RELIEF

Plaintiffs respectfully request that this Court grant the following relief, as allowed by 33 U.S.C. § 1365(a) and 28 U.S.C. §§ 2201(a) and 2202:

a. Declare Defendants to have violated and to be in violation of the Act as alleged herein;

b. Enjoin Defendants from discharging pollutants from the Facility except as authorized by and in compliance with the NPDES Permit;

c. Order Defendants to take appropriate actions to remediate the harm caused by the violations of the NPDES Permit and the CWA, to the extent possible;

d. Order Defendants to submit all past, present, and future temperature and dissolved oxygen data to the agencies specified in Part I.A.13 of the NPDES Permit;

e. Order Defendants to pay up to $37,500 per day per violation for all Clean Water Act violations occurring prior to November 2, 2015, and up to $53,484 per day per violation for all Clean Water Act violations that occurred after November 2, 2015, as provided by sections 309(d) and 505(a) of the CWA, 33 U.S.C. §§ 1319(d) and 1365(a), and by 40 C.F.R. §§ 19.1–19.4, or as further adjusted pursuant to the Federal Civil Penalty Inflation Adjustment Act of 2015 and EPA's Civil Monetary Penalty Inflation Adjustment Rules;

f. Order Defendants to pay the costs of litigation, including Plaintiffs' reasonable investigative costs, attorneys' fees, witness and consultant fees, and other costs, in accordance with section 505(d) of the CWA, 33 U.S.C. § 1365(d); and

g. Award any such other and further relief as this Court may deem appropriate.

Dated this 4th day of March, 2019

Respectfully submitted,

/s/ Daniel J. Mullen
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4838-5232-8073, v. 1

Exhibit A

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"),

Public Service of New Hampshire
Merrimack Station

is authorized to discharge from the facility located at

Bow, New Hampshire 03301

to receiving waters named:

Merrimack River

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective (30) thirty days from the date of issuance.

This permit and the authorization to discharge expires (5) five years from the effective date.

This permit supersedes the permit issued on September 30, 1985.

This permit consists of 22 pages in Part I including effluent limitations, monitoring requirements, etc., Attachment I, Location of Sampling Stations, and 22 pages in Part II including General Conditions and Definitions.

Signed this 25th **day of** June 1992

Director
Water Management Division
Environmental Protection Agency
Region I
Boston, MA

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Except as specified in Paragraphs 1 through 19 herein, the permittee shall not discharge to the Merrimack River, a final effluent to which it has added any pollutants.

   a. Chlorine and bromine may be used as a biocide. No other biocide shall be used without written approval from the Regional Administrator and the Director. The term chlorination will include bromination, if bromine is used. For this permit total residual oxidants (TRO) is synonymous with total residual chlorine (TRC). The chlorination cycle shall not exceed two hours in any one day for any one unit. Simultaneous multi-unit chlorination is not allowed.

   b. The discharges shall not jeopardize any Class B use of the Merrimack River and shall not violate applicable water quality standards. Pollutants which are not limited by this permit, but which have been specifically disclosed in the permit application, may be discharged at the frequency and level disclosed in the application, provided that such discharge does not violate Section 307 or 311 of the Act or applicable water quality standards.

   c. All live fish, shellfish, and other aquatic organisms collected or trapped on the intake screens shall be returned to their natural habitat. All solid materials except for naturally occurring materials such as leaves, branches, grass, and so forth, will be removed from the screens and have land disposal.

   d. This permit shall be modified, revoked or reissued to comply with any applicable effluent standard or limitation issued or approved under Section 301(b)(2)(C) and (D), 304(b)(2), and 207(a)(2) of the Act, if the effluent standard or limitation so issued or approved:

      (1) contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or

      (2) controls any pollutant not limited by this permit.

If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the Act.

e. The term "Regional Administrator" means the Regional Administrator of Region I of the U. S. Environmental Protection Agency and the term "Director" means the Director of the Water Supply and Pollution Control Division, New Hampshire Department of Environmental Services.

f. It has been determined, based on engineering judgement, that the circulating water intake structure presently employs the best technology available for minimizing adverse environmental impact. Any change in the location, design or capacity of the present structure shall be approved by the Regional Administrator and the Director. The present design shall be reviewed for conformity to regulations pursuant to Section 316(b) of the Act when such are promulgated.

g. The combined thermal plumes for the station shall; (a) not block zone of fish passage, (b) not change the balanced indigenous population of the receiving water, and (c) have minimal contact with the surrounding shorelines.

h. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

i. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR 122.42):

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

(a) One hundred micrograms per liter (100 ug/l);

(b) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. §122.21(g)(7); or

(d) Any other notification level established by the Director in accordance with 40 C.F.R. §122.44(f) and New Hampshire regulations.

2. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

(a) Five hundred micrograms per liter (500 ug/l);

(b) One milligram per liter (1 mg/l) for antimony;

(c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. §122.21(g)(7); or

(d) Any other notification level established by the Director in accordance with 40 C.F.R. §122.44(f) and New Hampshire regulations.

j. Water drawn from fuel oil tanks shall not be discharged into the Merrimack River.

k. There are two (2) discharges which are not covered by this NPDES permit and are permitted by the following regulatory agencies: New Hampshire Department of Environmental Services - Wetlands Board and the U.S. Army Corps of Engineers. As a cautionary note, these discharges must satisfy New Hampshire Water Quality Standards (see Part I.C.1.f.).

l. Conceptual plans for the necessary construction associated with the segregation of the ash settling pond from the nearby wetlands shall be submitted to the State for approval within one month of the effective date of this permit.

m. Construction of the required facilities shall begin within 90 days after the permittee is in receipt of all requisite permits or a later date as approved by the EPA and the State. The permittee shall notify EPA and the State within 30 days of receipt of all requisite permits.

n. All construction required by the plans shall be completed and the facilities placed in operation within 12 months after receipt of all requisite permits or at a later date as may be approved by the Regional Administrator and the Director.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 001: Circulating Cooling Water from the MK-1 condenser outlet.

a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report	69.1	Continuous	Calculate[b]
Total Residual Oxidants (mg/l)	----	0.20	Weekly, When in use	Grab

b. Based on pump curves, hours of pump operation, and 190 feet river levels.

c. Simultaneous multi-unit chlorination is not allowed. Samples for Total Residual Chlorine measurement shall be taken during the chlorination of circulating water.

d. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: At a representative point prior to discharge into the cooling canal, see Part c.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 002: Circulating Cooling Water from the MK-2 condenser outlet.

a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report	187.2	Continuous	Calculate[b]
Total Residual Oxidants (mg/l)	----	0.20	Weekly, When in use	Grab

b. Based on pump curves, hours of pump operation, and 190 feet river levels.

c. Simultaneous multi-unit chlorination is not allowed. Samples for Total Residual Chlorine measurement shall be taken during the chlorination of circulating water.

d. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: At a representative point prior to discharge into the cooling canal, see Part c.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 003: Circulating Cooling Water (001 & 002) including Ash Settling Pond Discharge (003A/003B), and West Yard Drain.

a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	265.3	275.4	Continuous	Calculate (@ 190' elevation)
Oil and Grease[h] (mg/l)	-----	Report	Monthly[g]	Grab
Dissolved Oxygen (% Saturation)	-----	75 (minimum)	Monthly	Grab
Total Residual Oxidants[1] (mg/l)	-----	0.026[2]	Monthly[i], When in use.	Grab
pH[c] (range, in s.u.)	6.5-8.0[h]		Continuous	Continuous
N-5, River Water pH (range, in s.u.)	Report Range		Continuous	Continuous

b. Simultaneous multi-unit chlorination is not allowed.
c. The pH shall not be less than 6.5 standard units (s.u.) nor greater than 8.0 s.u., or shall be as naturally occurs in the receiving water. The discharge pH shall be monitored continuously (see Parts I.A.12.a. and I.C.1.a.).
d. There shall be no discharge of oil sheen, floating solids, or visible foam in other than trace amounts.
e. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: At a representative point prior to discharge of the cooling canal into the receiving water.
f. Temperature - See Paragraph 11, page 16 of 22, for "Temperature Monitoring and Power Spray Module (PSM) Operation".
g. Required only when oil sheen is observed; otherwise report results based on daily observations.
h. Required for State certification.
i. Based on a review of the monitoring data collected during the first 12 months at Outfall 003, the monitoring frequency and testing requirements may be reduced, if the test results are consistently below the minimum level (ML).

SEE PAGE 9 OF 22 FOR AN EXPLANATION OF THE NUMERICAL SUPERSCRIPTS

EXPLANATION OF THE NUMERICAL SUPERSCRIPTS USED ON PAGE 8 OF 22 OF THE PERMIT.

(1) The preferred method of analysis for Total Residual Chlorine is the Low-Level Amperometric Titration Method using a chart recorder if possible. The EPA approved method is found in Standard Methods for the Examination of Water and Wastewater, 17th Edition, Method 4500-CL E

An alternate method of analysis for Total Residual Chlorine is the DPD spectrophotometric, using a longer cell (e.g. 5 cm. to 10 cm. if possible. The EPA approved method (EPA no. 330.5) is found in Standard Methods for the Examination of Water and Wastewater, 17th Edition, Method no. 4500-Cl G or 408E (16th ed.).

(2) For this permit, the minimum level (ML) for Total Residual Chlorine (TRC) has been defined as 0.05 mg/l (50 ug/l) and that the value will be reduced as more sensitive test methods are approved by the EPA and the State of New Hampshire. A non-detect can only be a value below the ML of 50 ug/l. A result of a non-detect or a value of 50 ug/l will be considered in compliance with the permit limits. Values greater than 50 ug/l will be considered in non-compliance with the permit limits for TRC.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

5. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 003A: Ash Settling Pond Discharge during routine operation.

a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	9.0	19.1	Continuous	Continuous
Oil and Grease (mg/l)	15.0	20.0	Monthly	Grab
Suspended Solids (mg/l)	30.0	100.0	Monthly	Grab
Total Copper (mg/l)	----	0.20	Quarterly	Grab
Total Iron (mg/l)	----	1.0	Quarterly	Grab
pH (range, in s.u.)	Report		Continuous	Continuous

b. The pH shall be monitored continuously during routine operations. Report the maximum and minimum values for the month.

c. There shall be no discharge of oil sheen, floating solids, or visible foam in other than trace amounts.

d. All routine analyses for each month will be grouped and reported on a single discharge monitoring report form.

e. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Point of discharge prior to dilution with the circulating cooling water (at the weir).

f. See Part I.C.1.e. on coal pile runoff discharges to ash settling pond.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

6. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 003B: Ash settling pond discharge during chemical cleaning.

a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	----	19.1	Continuous	Continuous
Suspended Solids (mg/l)	30.0	100.0	Daily	Composite
Total Copper (mg/l)	----	0.077	Daily	Composite
Total Iron (mg/l)	1.0	1.0	Daily	Composite
Oil and Grease (mg/l)	15.0	20.0	Daily[g]	Grab
pH (range, in s.u.)	Report[b]		Continuous	Continuous

b. Report the maximum and minimum values for the month.

c. There shall be no discharge of floating solids or visible foam in other than trace amounts.

d. Chemical cleaning operations shall occur no more than 30 days during each year. The permittee shall notify the Director or designee at least 72 hours in advance of such operations and furnish an estimate of the length of time over which the operation shall occur and the chemicals to be used. Sampling shall begin at least 3 hours after the discharge from the wastewater treatment basins begins (see Parts I.C.1.c. and I.C.1.d.).

e. The analytical results for each chemical cleaning operation shall be reported on a separate discharge monitoring report form.

f. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Point of discharge prior to dilution with the circulating cooling water (at the weir).

g. Required only when an oil sheen is observed; otherwise one grab sample per cleaning event.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

7. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 004(NB): MK-1 Screen Wash-water; MK-2 Screen Wash-water; MK-1 Screenhouse Floor Sump water; MK-2 Screenhouse Floor Sump water; MK-2 Screenhouse Roof Drain; and Fire Protection Overflow effluent subject to the following conditions:

a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (GPD)	----	Report	Annual	Estimate-total
Oil & Grease[b] (mg/l)	----	Report Range	Annual[d]	Grab[c,b]
pH[b,f] (range, in s.u.)	6.5 - 8.0		Annual	Grab[c,b]

NB Designated as Outfall(s) XXX and YYY in Form 2C of Application (5 separate pipes).

b. Required for State Certification.
c. Report range of results of grab samples of each of the 5 pipes.
d. Annual sample only required if oil sheen is observed; otherwise report results of daily observation.
e. All live fish, shellfish and other organisms collected or trapped on the intake screens should be returned to their habitat, sufficiently distant from the intake structures to prevent re-impingement. All solid materials except for naturally occurring materials such as leaves, branches, grass, and so forth will be removed from the screens shall have land disposal (see Part I.A.c.).
f. The pH shall not be less than 6.5 standard units (s.u.) nor greater than 8.0 s.u., or as naturally occurs in the receiving water (see Part I.C.1.a.).
g. There shall be no discharge of floating solids, oil sheen or visible foam in other than trace amounts.
h. Samples taken in compliance with the monitoring requirements specified above shall be taken at some representative point prior to discharge to the receiving water.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

8. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 005(NB): MK-1 Maintenance Sump discharge and MK-2 Maintenance Sump discharge subject to the following conditions:

a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (GPD)	----	Report	Once/Annual-Outage	Estimate Total
Oil & Grease[b] (mg/l)		Report Range	Once/Annual[d]-Outage	Grab[c,b]
pH[b,e] (range, in s.u.)	6.5 - 8.0		Once/Annual-Outage	Grab[c,b]

NB Designated as Outfall(s) XXX in Form 2C of Application (4 separate pipes).

b. Required for State Certification.
c. Report range of results of grab samples of each pipe for which a discharge occurs.
d. Sampling during the annual outage is only required if an oil sheen is observed; otherwise report the results of daily observation.
e. The pH shall not be less than 6.5 standard units (s.u.) nor greater than 8.0 s.u., or as naturally occurs in the receiving water (see Part I.C.1.a.).
f. There shall be no discharge of floating solids, oil sheen or visible foam in other than trace amounts.
g. Samples taken in compliance with the monitoring requirements specified above shall be taken at some representative point prior to discharge to the receiving water.
h[b]. The permittee shall report in the discharge monitoring report which of the sumps was discharging at the time of the sample collection.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

9. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 006(NB): Stormwater from the Southeast Yard Drain.

a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (GPD)	----	Report[b]	Annual	Estimate
Oil and Grease (mg/l)	----	Report	Annual[c]	Grab
TSS (mg/l)	----	Report	Annual	Grab
pH (range, in s.u.)	Report Range		Annual	4 Grabs

NB Designated as Outfall(s) XXX in Form 2C of Application.

b. Report actual flow based on annual precipitation data or estimated flow derived from a 10 year, 24 hour rainfall event.

c. Required only when an oil sheen is observed; otherwise report results of observation during rain events.

d. There shall be no discharge of floating solids or visible foam in other than trace amounts.

e. Samples taken in compliance with the monitoring requirements specified above shall be taken at some representative point prior to discharge to the receiving water.

10. Biological Monitoring

a. Downstream Fish Passage Agreement

The New Hampshire Fish & Game Department, the U.S. Fish & Wildlife Service, PSNH, and other Federal and State agencies are currently negotiating an agreement relative to the downstream migration of anadromous fish at several hydroelectric facilities on the Merrimack River. When the agreement is finalized, the technical advisory committee (see Part I.A.15.) may recommend revisions to the fish impingement (Part I.A.10.b.) and pump entrainment (Part I.A.10.c.) monitoring programs described below. Upon approval, by the Regional Administrator and the Director, the revisions shall become an enforceable element of this permit.

b. Impingement Monitoring

1. PSNH shall conduct impingement monitoring at the Merrimack Station when flows from Garvins Falls Station drop below 900 CFS during any period from July 1st through October 15th. Impingement monitoring shall consist of collecting all fish from both MK-1 and MK-2 travelling screen washes during one continuous 48-hour period per week.

2. PSNH shall report in writing to the New Hampshire Fish and Game Department (NHF&GD), U.S. Fish and Wildlife Service (USF&WS), New Hampshire Department of Environmental Services (NHDES), and the U.S. Environmental Protection Agency (USEPA) any extraordinary impingement events (EIE) at Merrimack Station. An extraordinary impingement event is defined as an event when 50 or more fish at any one time, of any size or species, are either distressed or killed as a result of impingement. Twenty-four hour reporting of EIEs will be in accordance with Part II, Section D, Part 1.e, and annual reporting of EIEs in accordance to Paragraph 13.

c. Pump Entrainment Monitoring, American Shad and River Herring Ichthyoplankton

PSNH shall conduct River Herring Ichthyoplankton and American Shad Ichthyoplankton pump entrainment monitoring at the Merrimack Generating Station from June 15th to July 15th when significant

numbers of upstream migrating River Herring and American Shad pass the Hooksett Dam. "Significant" numbers of upstream migrating River Herring and American Shad will be as defined in the downstream fish passage agreement (Part I.A.10.a.). Ichthyoplankton pump entrainment monitoring will be conducted at MK-1 and MK-2 for 24 continuous hours, twice per week.

11. Temperature Monitoring and Power Spray Module (PSM) Operation

a. Continuous River Surface Temperature Monitoring

Continuous river surface temperature monitoring in the vicinity of the Merrimack Generating Station shall be conducted on the following basis. Open-river surface water temperatures will be continuously monitored at control Station N-10, effluent discharge station Zero, and mixing zone Station S-4 (see ATTACHMENT I). The discharge Station Zero temperature monitoring probe will remain in place and in operation year round. Stations N-10 and S-4 temperature monitoring probes will be removed from the river and from operation in the fall when ambient river water temperatures have dropped below 40^0F (4.4^0C) and replaced when ambient river water temperatures have risen to above 50^0F in the spring. Ambient river water temperatures for removal and installation of the probes are defined as measured at Station N-10 for the fall probe removal, and at the Merrimack Station Unit II condenser inlet for the spring probe replacement.

Monitoring program data shall be reported in accordance with Paragraph 13, below.

b. Power Spray Module (PSM) Operation

The power spray module system shall be operated, as necessary, to maintain either a mixing zone (station S-4) river temperature not in excess of 69^0F, or a station N-10 to S-4 change in temperature (Delta-T) of not more than 1^0F when the N-10 ambient river temperature exceeds 68^0F. All available PSM's shall be operated when the S-4 river temperature exceeds both of the above criteria (reference: "Predictive Model and User Guide for Spring and Fall Optimization of Power Spray Modules").

12. pH Monitoring and Dissolved Oxygen

    a. The permittee shall continuously monitor the pH of both an ambient river control station and the circulating water discharge. The circulating water discharge shall be monitored at the point of cooling canal discharge into the Merrimack River (at the footbridge in the vicinity of Station Zero-west). The ambient river control station will be at a Merrimack Station inlet structure (Station N-5).

    b. The permittee shall continuously monitor the dissolved oxygen content of both an ambient river control station and the circulating water discharge. Dissolved oxygen monitoring will be suspended in the fall when ambient river water temperatures have dropped below 40^0F (4.4^0C), and reinstated when ambient river water temperatures have risen to above 50^0F in the Spring (reference the temperature monitoring requirements of Section 11.a, above). The circulating water discharge shall be monitored at the point of cooling canal discharge into the Merrimack River (at the footbridge in the vicinity of Station Zero-west). The ambient river control station will be at the Merrimack Station inlet structure (Station N-5).

13. All biological and hydrological monitoring program data shall be submitted to the NHDES, NHF&GD, USF&WS, and the Regional Administrator by December 31 of the following year.

14. The permittee has provided the State and EPA with the following agreement, entitled "A Comprehensive Plan for Provision of Anadromous Fish Passage Measures and Facilities at PSNH's Merrimack - Pemigewasset River Hydroelectric Dams, FERC Projects No. 1893, 2456, and 2457." The permittee shall also provide all technical advisory committee (TAC) members (see Part I.A.15., below) with copies of the annual March 1st update to this plan and any technical reports associated with it.

15. A technical advisory committee (TAC) shall be organized. Committee members shall be senior biologists appointed by the Administrators (or appropriate Division/Branch Directors) of the following federal and state regulatory agencies: NHDES, NHF&GD, USEPA, and USF&WS.

16. The permittee shall propose to the TAC a program and a schedule, for review and confirmation, which resolves the issues identified in Sub-part 17, below.

    a. The TAC may accept, reject, or modify the proposed program and schedule. After acceptance of the program and schedule by the TAC, the program will be submitted to the Regional Administrator and the Director for approval. Upon approval, the proposed program and schedule become enforceable elements of this permit.

    b. Annually after the effective date of this permit, the permittee may propose changes to the approved biological and hydrological programs to the Regional Administrator and the Director - (a proposed modified program for the calendar year of 1993 must be submitted prior to January 1, 1993, for review and acceptance by the TAC). After the TAC acceptance, and upon the approval of the Regional Administrator and the Director, the proposed modified program(s) will become an enforceable element of this permit.

    c. All biological and hydrological programs will be under the guidance of the TAC; i.e., review of the proposed programs, analytical protocols, and analysis of data. Based upon its conclusions, the TAC will make recommendations for modification(s) of the permit to EPA and the State to ensure protection of the aquatic community. Biological and hydrological study reports shall be submitted on a semi-annual basis with an annual report summarizing the previous year's information and conclusions.

17. Within 90 days after the effective date of the permit, the permittee shall schedule and conduct a planning meeting with the technical advisory committee. The primary objective of this meeting is the design, development and implementation of an experimental program to resolve the following issues:

    a. Determine the seasons at which the anadromous fish will migrate and the temperatures that would affect/impede this migration and life cycle temperature requirements related to each species.

    b. Determination of the thermal plume-configuration in the river and its effect(s): 1) on anadromous fish during the migration seasons and 2) upon indigenous fish under low water conditions.

c. Determination of a seasonal T_{max} at the point of discharge from the canal into the river, that would protect the anadromous and indigenous fish.

d. Determine, if found to be necessary, a summer Delta-T (downstream temperature minus upstream temperature) that would protect the anadromous and indigenous fish from artificially-heated river water that would be injurious to the aquatic community.

e. Determination of a maximum "Delta-T" (discharge temperature minus intake temperature) at the head of the canal due to a major plant/condenser shutdown. (Note: This is the maximum temperature excursion expected in the canal during an abrupt shutdown of the power plant during the winter.)

f. Assess the resident fish population in the cooling-water canal, and determine if this population is a significant portion of the local fishery and must be protected. If the resident fish require protection, recommendations are to be made as to the type of physical or operational improvements are required.

g. Assess the existing historical chemical, thermal, and biological data and determine the scope of new data that must be obtained to augment the existing data base for these studies.

h. Provide copies of a written agenda and work scope to accomplish the above objectives to each TAC member approximately 2 weeks prior to the above planning meeting. The TAC may approve, modify, or disapprove the proposed work scope in a formal meeting.

18. The permittee shall submit the following reports to the TAC for their approval unless the date(s) is extended by the Regional Administrator and the Director after recommendation by the TAC:

a. A preliminary report summarizing the information required in Part I.A.17.g. and a projection of the biological and hydrological work to be accomplished during the Summer of 1993, on March 1, 1993.

b. A draft final report on March 1, 1994.

19. Based on the results of the final report, this permit may be reopened (40 CFR 122.62) to define a T_{max} or "Delta-T" or any other parameter required to control the discharge from the cooling water canal into the river.

20. Assuming that the cooling water canal discharge temperature must be reduced by some amount, conduct a cost/benefit study for the appropriate techniques to lower the cooling water canal discharge-temperature by 2, 4, 6, etc. degrees F. This systems-study will be submitted within six (6) months of the submittal date of the final report to the TAC.

B. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the month following the completed reporting period.

Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency
NPDES Program Operations Section
P.O. Box 8127
Boston, MA 02114

The state agency is:

Department of Environmental Services
Water Supply & Pollution Control Division
Permits and Compliance Section
Hazen Drive, P.O. Box 95
Concord, New Hampshire 03301

C. STATE PERMIT CONDITIONS

1. The permittee shall comply with the following conditions which are included as State Certification requirements:

a. The pH for class B waters is 6.5-8.0 S.U. or as naturally occurs in the receiving water. The 6.5-8.0 S.U. range must be achieved in the final effluent unless the permittee can demonstrate to the Division: 1) that the range should be widened due to naturally occurring conditions in the

receiving water or 2) that the naturally occurring source water pH is unaltered by the permittee's operations. The scope of any demonstration project must receive prior approval from the Division. In no case shall the above procedure result in pH limits less restrictive than any applicable federal effluent limitation guidelines.

b. Within 30 days of the effective date of the permit, the permittee shall provide representative sampling locations for both Outfalls 001 and 002, upstream of any mixing with the cooling canal.

c. The permittee has determined that there is at least a three hour delay between discharges of treated wastewater from the wastewater treatment basins and the detection of the plume in the ash settling pond outfall. Therefore sampling conducted during chemical cleanings (Outfall 003B) must begin between three and four hours after the discharge from the wastewater treatment basins begin.

d. Weekend chemical cleaning discharges are prohibited unless provisions are made to allow for the collection by the NHDES of 24 hour composite samples during normal weekday working hours.

e. Coal pile runoff discharges to the ash settling basin are prohibited unless treated first in the wastewater treatment facility.

f. The permittee is authorized to discharge treated wastewater from the intake dredge de-watering lagoon via two 24 inch pipes. In addition to the conditions described in NH Wetlands Board Permit No. 88-1328 issued on April 30, 1991, or any subsequent revisions, the permittee shall insure that the discharges do not increase the naturally occurring turbidity of the Merrimack River by more than 10 nephelometric turbidity units.

2. This NPDES Discharge Permit is issued by the U.S. Environmental Protection Agency (EPA) under Federal and State law. Upon final issuance by the federal EPA, the Water Supply and Pollution Control Division may adopt this permit, including all terms and conditions, as a state discharge permit pursuant to RSA 485-A:13.

Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of State law, such permit shall remain in full force and effect under Federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this permit, if adopted as a state permit, shall remain in full force and effect under State law as a permit issued by the State of New Hampshire.

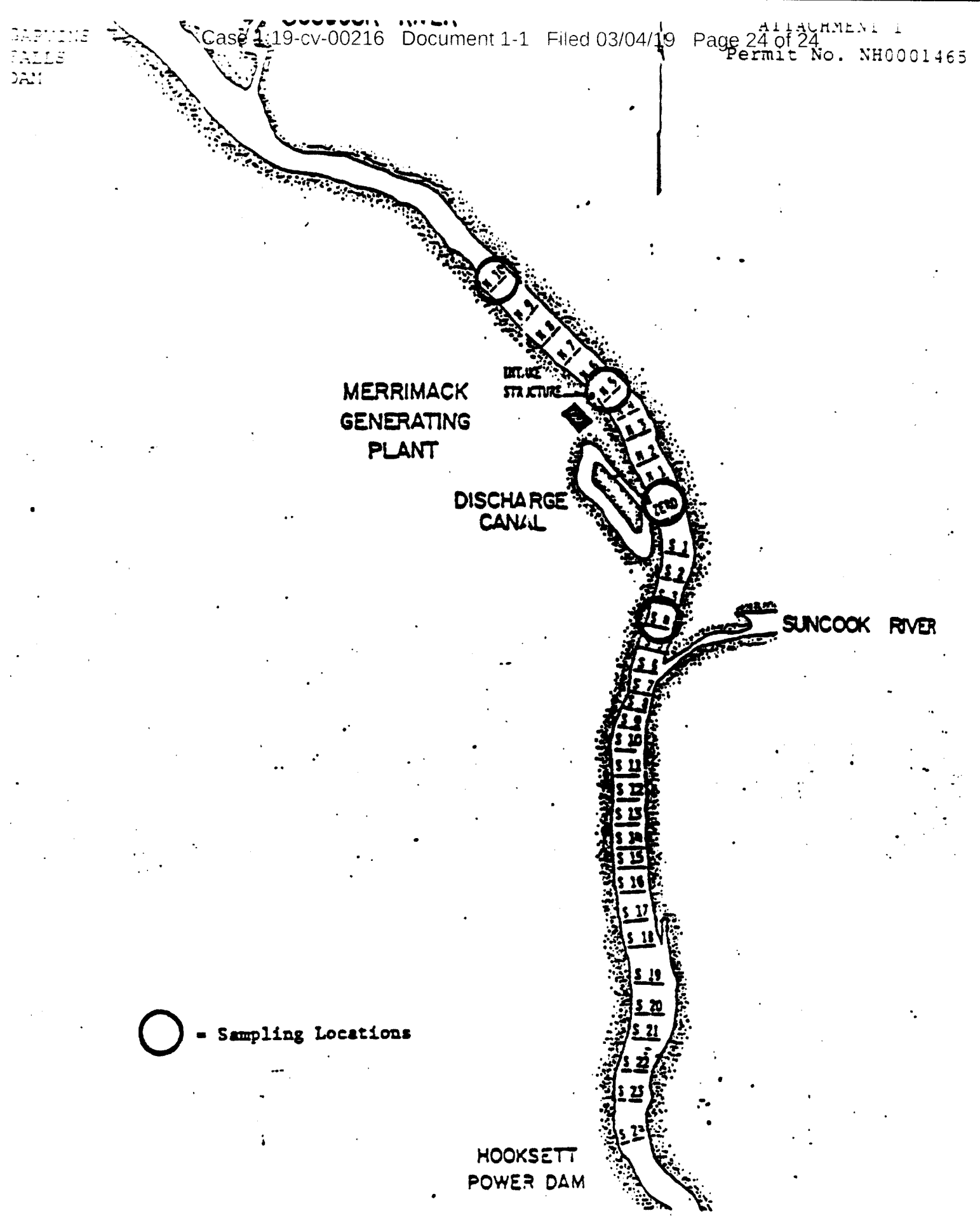

Figure 1. Location of sampling stations. Hooksett Pond, Merrimack River, NH.

Exhibit B

SUPER LAW GROUP, LLC

November 1, 2018

Via Certified Mail, Return Receipt Requested

Granite Shore Power LLC
c/o CCI
2200 Atlantic Street, Suite 800
Stamford, CT 06902

GSP Merrimack LLC
431 River Road
Bow, NH 03301

GSP Merrimack LLC
c/o CCI
2200 Atlantic Street, Suite 800
Stamford, CT 06902

Public Service Company of New Hampshire
780 N Commercial Street
Manchester, NH 03101

Re: Notice of Violation and Intent to File Suit under the Clean Water Act

To Whom It May Concern:

We write on behalf of the Sierra Club, Inc. and Conservation Law Foundation, Inc. (together, the "Notifiers") to notify you of their intent to file suit against Granite Shore Power LLC, GSP Merrimack LLC and Public Service Company of New Hampshire d/b/a Eversource Energy (collectively the "Operators") pursuant to Section 505(a) of the federal Clean Water Act ("CWA").[1] The Notifiers intend to file suit in the United States District Court for the District of New Hampshire seeking appropriate equitable relief, civil penalties, and other relief no earlier than 60 days from the postmark of this letter.[2]

The Notifiers intend to take legal action against the Operators due to their ownership and operation of the Merrimack Station (the "Station"), a power plant on the banks of the Merrimack River in Bow, New Hampshire. The Merrimack Station is engaged in ongoing and continuous violations of the Clean Water Act. Namely, the Station has for decades discharged heated wastewater in a manner that is deleterious to the environmental and ecological health of the Merrimack River, and not in compliance with the National Pollutant Discharge Elimination

[1] 33 U.S.C. § 1365(a). We refer to statutory provisions by their section in the Clean Water Act and provide the parallel citation to the United States Code only on first reference.
[2] *See* 40 C.F.R. § 135.2(a)(3)(c) (CWA notice of intent to file suit is deemed to have been served on the postmark date).

System ("NPDES") permit for the Merrimack Station, (Permit NH0001465), which went into effect in 1992.[3] This conduct violates CWA § 301(a).[4]

I.

BACKGROUND

A. The Merrimack Station and Its Thermal Discharges

Merrimack Station is one of New England's oldest and, with a total capacity of approximately 520 megawatts, most polluting coal-fired power plants. Merrimack Station is located on approximately 230 acres of land in Bow, New Hampshire. The Station sits on the western bank of the Merrimack River in the middle of a 5.8 mile stretch known as the Hooksett Pool. The Hooksett Pool is a relatively shallow part of the river, ranging in depth from six to ten feet, bounded by the upstream Garvin's Falls Dam and the downstream Hooksett Dam.

For decades, the Station has drawn about 287 million gallons per day (design flow) of cooling water from the Merrimack River, killing, maiming, or poisoning fish, fish larvae, and other aquatic organisms that become trapped on the plant's intake screens, or are pulled into the existing once-through cooling system.[5] Power plants like the Station, that utilize "once-through" cooling systems, are capable of heating large volumes of water. These facilities withdraw water from a water body, heat that water up as a result of the cooling process, and then discharge the heated water (or "thermal effluent") to a receiving water body. Heated discharges can have a significant effect on the temperature of the receiving water, which in turn can cause great ecological harm.

The Merrimack Station discharges thermal effluent into the Hooksett Pool at temperatures above natural ambient levels. Indeed, the Station's thermal discharges frequently reach temperatures in excess of 90° Fahrenheit at downstream monitoring points, well in excess of what is tolerable for native species. Due to the relatively shallow depths in the Hooksett Pool, the thermal plume can extend far and wide, with elevated water temperatures observed at the Hooksett Dam, nearly three miles downstream. The thermal plume is most expansive in the warmer months when, during low-flow conditions, Merrimack Station may divert up to sixty-two percent of the entire River flow to cool the plant.[6] In the cooler months, warm temperatures in

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[3] Authorization to Discharge Under the National Pollutant Discharge Elimination System, Merrimack Station (Permit No. NH0001465) (June 25, 1992) (hereinafter the "NPDES Permit"); EPA, Region 1, Permit Modification for Transfer of Ownership (Permit No. NH0001465) (Jan. 16, 2018) (authorizing GSP Merrimack LLC to operate under the Stations' NPDES Permit)

[4] *See* 33 U.S.C. §1311(a).

[5] *See* EPA Region 1, 2011 Fact Sheet, Attachment D, Clean Water Act NPDES Permitting Determinations for Thermal Discharge and Cooling Water Intake Structures at Merrimack Station in Bow, New Hampshire ("Attachment D") at 31. Available at: https://www3.epa.gov/region1/npdes/merrimackstation/pdfs/MerrimackStationAttachD.pdf.

[6] *See* Attachment D at 38.

the discharges harm native fish species by negatively affecting development and reproduction and harm the biological integrity of the Merrimack River by supporting a population of Asian clams, an invasive species.

The Merrimack River is an important public resource, prized by communities in New Hampshire and Massachusetts for its wildlife, aesthetic values, prominent role in the history of the region, and for the fishing, boating and other recreational opportunities it affords. However, as a result of operating in the same manner for decades, the Merrimack Station's operations have contributed to a *nearly 95 percent decline* in resident fish species in the Hooksett Pool, while allowing for certain harmful, non-native, heat tolerant species to upset the ecological balance in the river.[7] To someone who only knew the environment and biota of the Hooksett Pool in 1960, when the Station was placed in service, the population of fish, shellfish and wildlife in and on this stretch of river would be unrecognizable.

B. Relevant Statutory and Regulatory Background

Congress passed the CWA in 1972 "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[8] The CWA's goal is to eliminate all discharges of pollution into navigable waters.[9] To that end, the CWA prohibits point sources from discharging pollutants into waters of the United States, except in compliance with a NPDES permit.[10]

Heat is defined as a pollutant under the Clean Water Act.[11] Permit limits for thermal discharges must, at a minimum, satisfy federal technology-based requirements, as well as any more stringent requirements based on state water quality standards that may apply.[12] CWA § 316(a) provides for a variance from the general requirement that NPDES permits include effluent limits that, at a minimum, satisfy federal technology-based standards, and that also satisfy any more stringent requirements based on state water quality standards. Section 316(a) authorizes the permitting agency to impose less stringent thermal discharge limits if the permittee can demonstrate that "any effluent limitation proposed for the control of the thermal component of any discharges . . . will require effluent limitations more stringent than necessary to assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife."[13] Any 316(a) variance must "assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water."[14]

C. The Merrimack Station's NPDES Permit

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[7] *See* Attachment D at 117.
[8] 33 U.S.C. § 1251(a).
[9] *See id.* § 1251(a)(l)
[10] *See* 33 U.S.C. §§ 1311(a), 1342(a).
[11] 33 U.S.C. § 1362(6).
[12] *See* 33 U.S.C. § 1311(b)(1)(C)
[13] 33 U.S.C. § 1326(a).
[14] *Id.*; 40 C.F.R. § 125.70.

The Merrimack Station's NPDES permit, which the United States Environmental Protection Agency ("EPA") issued in 1992, includes a section 316(a) variance that permits Merrimack to operate without complying with numeric effluent limitations on thermal discharge based on the level of control achievable through use of the best available technology. Instead the permit specifies that discharges shall not violate any applicable water quality standards.[15] In addition, the NPDES Permit also requires that thermal plumes from the station shall not block the zone of fish passage, shall not change the balanced indigenous population of the receiving water, and shall have minimal contact with the surrounding shorelines.[16] The NPDES permit importantly requires continuous monitoring of Temperature and Dissolved Oxygen.[17]

EPA proposed a new draft permit for Merrimack Station on September 30, 2011. The comment period for the draft permit ended on February 28, 2012. After reviewing comments, EPA proposed a revised draft permit on April 18, 2014. In the draft permit, EPA tentatively rejected Eversource's request for a CWA § 316(a) thermal discharge variance. EPA concluded that Eversource had not demonstrated that the Merrimack Station's thermal discharge has not caused prior appreciable harm to Hooksett Pool's balanced indigenous population of fish.[18] To the contrary, EPA found that "the evidence as a whole indicates that Merrimack Station's thermal discharge has caused, or contributed to, appreciable harm to Hooksett Pool's balanced, indigenous population of fish."[19] EPA has not finalized the Draft permit, and therefore the 1992 NPDES permit remains in effect. Nevertheless, EPA's finding of "appreciable harm" to the balanced indigenous population is pertinent to the noticed violations below.

II.

MERRIMACK STATION IS ENGAGED IN ONGOING AND CONTINUOUS VIOLATIONS OF THE CLEAN WATER ACT

The CWA prohibits the discharge of pollutants to the waters of the United States except in compliance with a NPDES permit.[20] The discharge of thermal pollution from Merrimack Station has violated and continues to violate the terms of the Station's NPDES permit in the following ways.

A. Violations of Thermal Effluent Limits

The NDPES Permit requires that:

[15] NPDES Permit at I.A.1.b. (pg. 2)
[16] *Id.* at Part I.A.1.g (pg. 3).
[17] NPDES Permit at I.A.11.a. (pg. 16) & 12.a, b (pg. 17).
[18] To the contrary, EPA found that the evidence as a whole indicates that Merrimack Station's thermal discharge has caused, or contributed to, appreciable harm to Hooksett Pool's BIP of aquatic organisms.
[19] *Id.*
[20] *See* CWA §§ 301(a) and 402.

> The combined thermal plumes for the station shall: (a) not block the zone of fish passage, (b) not change the balanced indigenous population of the receiving water, and (c) have minimal contact with the surrounding shorelines.[21]

The Merrimack Station's discharges to the Merrimack River create a thermal plume that violates all three of these limitations.

1. The Station's Thermal Plume Blocks the Zone of Fish Passage.

Based on a review of publicly available data and reports, the Notifiers allege that the Merrimack Station's thermal plume blocks the zone of fish passage in the Hookset Pool. The Station's thermal plume can affect most of the water column because of the shallow depths in the Hooksett Pool, while also extending laterally to reach critical shoreline habitat. Blockage is most pronounced during summer months when, during typical low flow conditions, the Station's water withdrawals can divert and heat 62 percent of the water passing through the Hooksett Pool.[22] Also, the Station's thermal plume can extend downstream below the Hooksett Dam, creating unnaturally warm temperatures in large swaths of the River. These temperatures exceed fish tolerance thresholds for native species at times, including American Shad and Yellow Perch, further indicating that the thermal plume blocks the zone of fish passage. The Station violates the conditions of its NPDES permit at least on each occasion that the Station's thermal plume blocks the zone of fish passage in the Hooksett Pool by causing temperatures that exceed fish tolerance thresholds for any life stage of any native species.[23] Such incidents have recurred in many recent years including, for example, the summer of 2016 – the last summer for which data are available to the Notifiers.

2. The Station's Thermal Plume Has Changed the Balanced Indigenous Population of the Merrimack River and Perpetuated Such Conditions.

The Merrimack Station's thermal plume has over the course of decades changed and degraded the balanced indigenous population of aquatic species in the Hooksett Pool. To this day, the Merrimack Station continues to change the balanced indigenous population in the Hooksett Pool. The impacts of the Station's thermal discharges on the balanced indigenous population are most acute during spring and summer conditions. As EPA concluded in 2014, after exhaustive study, "the evidence as a whole indicates that Merrimack Station's thermal discharge has caused, or contributed to, appreciable harm to Hooksett Pool's balanced, indigenous community of fish."[24]

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[21] NPDES Permit at Part I.A.1.g (pg. 3).

[22] Attachment D at 38. And sometimes more – EPA reports that peak day withdrawals of 75% of the flow have been recorded during severe low flow days in July, and even greater proportions in August. *See id.* at xiv.

[23] Examples of such temperature thresholds for certain species in different months of the year can be found in EPA's supporting analysis for the 2011 draft permit. *See, e.g.*, Attachment D at, Tables 8-2, 8-3, 8-4 and 8-5 (pages 196, 208, 209-10).

[24] Attachment D at 121; *see id.* at 118-19 (summarizing "[s]ome of the more notable evidence of Merrimack Station's thermal effects, or the plant's capacity to affect, the balanced, indigenous community[.]")

For example, publicly available temperature data and reports reveal that high spring and summer temperatures in the Hooksett Pool surpass important survival thresholds for native fish species, including American Shad and Yellow Perch, as well as for native freshwater mussels. In the cooler months, warm temperatures in the discharge canal attract native fish species, negatively affecting development and reproduction. In addition, the presence of a strong population of non-native Asian Clams in the area affected by the thermal plume is further evidence that the plume is changing the balanced indigenous population in the Hooksett Pool.

Since 2014, EPA has conducted field investigations confirming the presence of Asian clams and noting that they are abundant in and near the Merrimack plume, rarer downstream, and not observed upstream of Merrimack's plume. These findings are consistent with scientific literature showing that Asian Clams have higher winter survival rates within the influence of power plants' thermal discharge than in ambient areas, and that the elevated temperatures appear to support the invasive clam's reproductive success, growth, and abundance.

In addition, the Notifiers note that, in recent years, the Station's episodic operating pattern has created rapid and significant temperature changes that adversely affect aquatic organisms.

The Station contributes to changes in the balanced and indigenous population of aquatic organisms in the Hooksett Pool through its discharges of waste heat.

3. The Merrimack Station's Thermal Plume Has More Than Minimal Contact with the Shoreline.

Publicly available data and reports indicate that the Merrimack Station thermal plume has been and is regularly in contact with both the east and west shoreline during summer conditions, and therefore the thermal plume does not "have minimal contact with the surrounding shorelines." Temperature data from summer months show completely-mixed lower Hooksett Pool waters can be 3.6 ° to 7.2° Fahrenheit warmer, and at times more than 10 ° Fahrenheit warmer, than upstream waters. Elevated water temperatures in the entire lower reach of the Hooksett Pool strongly suggest a shoreline-to-shoreline plume.

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For the reasons set forth in Part A of this letter, the Merrimack Station has violated and is engaged in ongoing and continuous violations of the NPDES permit's thermal effluent limitations and thus the Clean Water Act.

B. The Merrimack Station Has Violated and is Violating Water Quality Standards

The Merrimack Station has violated and is engaged in ongoing and continuous violations of New Hampshire state water quality standards, which are incorporated as terms of the NPDES permit.

The NPDES permit provides that the Merrimack Station's discharges "shall not jeopardize any Class B use of the Merrimack River and shall not violate applicable water quality standards."[25]

For Class B waters, New Hampshire state law dictates that: "[t]here shall be no disposal of sewage or waste into said waters . . . [where] such disposal of sewage or waste [would] be inimical to aquatic life or to the maintenance of aquatic life in said receiving waters . . . . "[26]

In addition,

> "[a]ny stream temperature increase associated with the discharge of treated sewage, waste or cooling water . . . shall not be such as to appreciably interfere with the uses assigned to this class. The waters of this classification shall be considered as being acceptable for fishing, swimming and other recreational purposes and, after adequate treatment, for use as water supplies."[27]

More generally, the New Hampshire water quality regulations mandate that: "[a]ll surface waters shall provide, wherever attainable, for the protection and propagation of fish, shellfish and wildlife, and for recreation in and on the surface waters."[28]

The regulations also dictate that: "[a]ll surface waters shall be restored to meet the water quality criteria for their designated classification including existing and designated uses, and to maintain the chemical, physical, and biological integrity of surface waters."[29]

"Biological integrity" is defined to mean:

> the ability of an aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of similar natural habitats of a region.[30]

.

New Hampshire water quality standard regulations specify a water quality criterion for "Biological and Aquatic Community Integrity":

> (a) The surface waters shall support and maintain a balanced, integrated, and adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of similar natural habitats of a region.

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[25] NPDES Permit at Part I.A.1.b (pg. 2)
[26] N.H. Rev. Stat. Ann. § 485-A:8(II).
[27] *Id.*
[28] N.H. Code R. Env-Wq § 1703.01(c).
[29] *Id.* § 1703.01(c).
[30] *Id.* § 1702.08.

(b) Differences from naturally occurring conditions shall be limited to non-detrimental differences in community structure and function.[31]

In sum, pollutant discharges to a Class B water body, such as the Hooksett Pool, may not harm aquatic life (*i.e.*, "be inimical to" or contribute to "detrimental differences" from naturally occurring conditions) or undermine a water body's ability to support and maintain what would otherwise be the natural, balanced community of aquatic life in that water body. Additionally, Merrimack Station's thermal discharges must not result in in-stream temperatures that "appreciably interfere" with fishing or other Class B uses in the Hooksett Pool.

The Merrimack Station's thermal discharges are causing an ongoing and continuous violation of water quality standards, in violation of the NPDES permit. In 2014, EPA concluded that the "Merrimack Station's current thermal discharges are not satisfying these criteria" and have "indeed been inimical to aquatic life in the Hooksett Pool."[32] This conclusion flowed directly from EPA's finding that the Merrimack Station has appreciably harmed the balanced indigenous population of aquatic species in the Hooksett Pool.

Further, EPA observed in 2011 that abrupt shutdowns in the colder seasons could cause "cold shocks", i.e., a relatively rapid reduction in discharge temperature, which can lead to the physiological impairment of fish and even to death.[33] EPA noted that studies "show that acclimation to cooler temperatures, at least for fish, is considerably slower (e.g. days versus hours) than acclimation to warmer temperatures."[34] In this regard, Merrimack's practice of operating sporadically in the winter months poses a threat to native species and the attainment of a balanced indigenous population in the Hooksett Pool. In response to EPA's call for additional public comments on renewal of the NPDES permit in 2017, the Notifiers submitted to EPA a report prepared by Ken Hickey and Peter Shanahan of HydroAnalysis, Inc., finding that even looking only at the averaged temperature data submitted by Eversource to the EPA, Merrimacks' sporadic operations cause sharp changes in water temperatures even in summer months. In winter months, the risk that Merrimack's intermittent operation will lead to cold shock is far greater. Merrimack violates water quality standards when it causes cold shock, because these conditions are inimical to aquatic life and further impede any chance to attain a balanced indigenous population of fish.

The Station's thermal discharges also cause or contribute to violations of New Hampshire's water quality standards for dissolved oxygen. The applicable standard is a daily average dissolved oxygen concentration that is 75% of the saturation concentration, and an instantaneous standard of 5.0 mg/L or greater at all times.[35] Violations of these standards occur during summer conditions in the Hooksett Pool, including but not limited to that portion of the Hooksett Pool at the bottom of the reach, near the Hooksett Dam, where EPA has noted that

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[31] *Id.* § 1703.19(a), (b).
[32] Attachment D at xi, 178.
[33] Attachment D at 349.
[34] *Id.*
[35] N.H. Code of Admin R. Ch Env-Wq 1700, 1703.07(b).

thermal discharge from Merrimack Station causes stratification of the water and consequent low dissolved oxygen in the underlying strata.

The Notifiers believe that the Station causes or contributes to violations of water quality standards in the Hooksett Pool through its pattern of discharges of waste heat. Therefore, the Merrimack Station is engaged in ongoing and continuous violations of applicable water quality standards, the NPDES permit, and the Clean Water Act.

C. The Merrimack Station Has Violated and is Violating Monitoring and Reporting Requirements.

The Merrimack Station has violated and is violating the monitoring and reporting requirements of the NPDES permit in an ongoing and continuous manner, by failing to submit continuous monitoring data to EPA and other agencies.

With respect to thermal monitoring, the NPDES permit requires that:

> Continuous river surface temperature monitoring in the vicinity of the Merrimack Generating Station shall be conducted on the following basis. Open-river surface water temperatures will be continuously monitored at control Station N-10, effluent discharge station Zero, and mixing zone Station S-4 . . . . The discharge Station Zero temperature monitoring probe will remain in place and in operation year round.[36]

The NPDES permit also requires continuous dissolved oxygen monitoring: "[t]he permittee shall continuously monitor the dissolved oxygen content of both an ambient river control station and the circulating water discharge. . . . [37]

The NPDES permit requires that all monitoring data be submitted annually to the EPA regional administrator: "All biological and hydrological monitoring program data shall be submitted to the NHDES, NHF&GD, USF&WS, and the Regional Administrator by December 31 of the following year."[38]

Since the NDPES permit went into effect, the Merrimack Station has not once submitted continuous thermal monitoring data to EPA, or to the best of the Notifiers knowledge, to any of the other agencies mentioned in the NDPES permit. To the extent that the Station has submitted summary data in place of the continuous data, this is insufficient as the permit requires that "*All* biological and hydrological monitoring program data shall be submitted." As such, the Merrimack Station has and is engaged in ongoing and continuous non-compliance with the NPDES permit's monitoring and reporting provisions and in violation of the Clean Water Act.

III.

[36] NPDES Permit at Part I.A11.a (pg. 16).
[37] *Id.* at Part I.A.12.b (pg. 17).
[38] *Id.* at Part I.A.13.(pg. 17).

PERSONS RESPONSIBLE FOR ALLEGED VIOLATIONS

The entities referred to collectively in this letter as the Operators are the persons, as defined by Section 502(5) of the CWA, responsible for the violations alleged in this Notice.

On information and belief, Public Service Company of New Hampshire d/b/a Eversource Energy until January 10, 2018, and thereafter Granite Shore Power LLC and GSP Merrimack LLC, have successively owned and operated the Merrimack Station. The Operators are responsible for ensuring that thermal discharges are in compliance with the CWA and that monitoring data are submitted to EPA and other agencies in accordance with the terms of the Merrimack Station's permit.

The Notifiers hereby put the Operators on notice that if the Notifiers subsequently identify additional persons as also being responsible for the violations set forth above, the Notifiers intend to include those persons in this action.

IV.

LOCATION OF ALLEGED VIOLATIONS

The violations alleged in this Notice have occurred and continue to occur at the Merrimack Station in Bow, New Hampshire and in the Merrimack River, Hooksett Pool reach.

V.

DATES OF VIOLATIONS

The Operators are liable for the above-described violations occurring prior to the date of this letter, and for every day after the date of this letter that these violations continue.

With respect to the dates that the permit's monitoring provisions have been violated, Part I.13 of Merrimack's permit requires that all data be submitted to EPA and other agencies by December 31 of the year following collection. Therefore, with respect to each year of missing or incomplete data, a separate date of violation has occurred on each date after December 31 of the year following collection.

Violations of the permit requirement that the plume have only minimal contact with the shores of the Merrimack river have occurred and continue to occur on all days when the thermal plume from Merrimack extends from shoreline to shoreline or for thousands of feet down the near shore of the Merrimack River. Such dates of violation occur principally during summer months.

Violations of the permit requirement that the plume not block the zone of fish passage have occurred and continue to occur, at least, on all occasions that the Station's thermal plume causes temperatures in the River, during spring and summer months, that exceed fish tolerance thresholds for any life stage of any native species. Such incidents have recurred in many recent years including, for example, the summer of 2016 – the last summer for which data are available to the Notifiers. To better enable the recipients of this notice letter to determine for themselves the dates of such violations, examples of relevant temperature thresholds for representative species in different months of the year can be found in EPA's supporting analysis for the 2011 draft permit.[39]

Violations of the permit requirements that the thermal plume shall not change the balanced indigenous population and shall ensure compliance with water quality standards have occurred continuously on all days within the statutory period. These violations are ongoing because Merrimack Station's pattern of episodic and significant thermal discharges continues to change and degrade the BIP and violate water quality standards by creating and perpetuating conditions that are inimical to aquatic life and undermine the Merrimack River's ability to support and maintain what would otherwise be the natural, balanced community of aquatic life.

VI.

RELIEF REQUESTED

The Notifiers will ask the court to order the Operators to comply with the Clean Water Act, to pay penalties, and to pay Notifiers' costs and legal fees.

First, the Notifiers will seek declaratory relief and injunctive relief to prevent further violations of the Clean Water Act pursuant to Sections 505(a) and (d) and such other relief as permitted by law.

Second, pursuant to Section 309(d) of the CWA,[40] each separate violation of the CWA subjects the Operator to a penalty of up to $37,500 per day per day per violation for all Clean Water Act violations occurring between January 12, 2009 and November 2, 2015; up to $51,570 per day per violation for all CWA violations occurring after November 2, 2015 and assessed on or after August 1, 2016 but before January 15, 2017; up to $52,414 per day per violation for all Clean Water Act violations occurring after November 2, 2015 and assessed on or after January 15, 2017, and up to $53,484 per day per violation for all Clean Water Act violations assessed on or after January 15, 2018 for violations that occurred after November 2, 2015.[41] The Notifiers will seek penalties.

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[39] See Attachment D, Tables 8-2, 8-3, 8-4 and 8-5 (pp.196, 208, 209-10).
[40] 33 U.S.C. § 1319(d); *see also* 40 C.F.R. § 19.4 (Adjustment of Civil Monetary Penalties for Inflation).
[41] 40 C.F.R. § 19.2-4.

Third, pursuant to the CWA, the Notifiers will seek recovery of their litigation fees and costs (including reasonable attorney and expert witness fees) associated with this matter.[42]

VII.

PERSONS GIVING NOTICE

The full name, address, and telephone number of the persons giving notice are as follows:

Sierra Club
Attn: Zachary Fabish
50 F Street, N.W., 8th Floor
Washington, D.C. 20001
(202) 675-7917

Conservation Law Foundation
Attn: Tom Irwin
27 North Main Street
Concord, NH 03301
(603) 225-3060

VII.

IDENTIFICATION OF COUNSEL

The Notifiers are represented by legal counsel in this matter. The name, address, and telephone number of the Notifiers' attorneys are:

Edan Rotenberg, Esq.
Nicholas W. Tapert, Esq.
Super Law Group, LLC
180 Maiden Lane, Suite 603
New York, New York 10038
(212) 242-2355

IX.

CONCLUSION

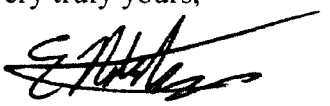
The foregoing provides more than sufficient information to permit the Operators to identify the specific standard, limitation, or order alleged to have been violated, the activity alleged to constitute a violation, the person or persons responsible for the alleged violation, the

[42] 33 U.S.C. § 1365(d); 42 U.S.C. § 6972(e).

location of the alleged violation, the date or dates of such violation, and the full name, address, and telephone number of the person giving notice.[43]

During the sixty-day notice period, the Notifiers are willing to discuss effective remedies for the violations noted in this letter that may avoid the necessity of protracted litigation. If the Operators wish to pursue such discussions, please contact the undersigned attorneys immediately so that negotiations may be completed before the end of the sixty-day notice period. We do not intend to delay the filing of a complaint in federal court, regardless of whether discussions are continuing at the conclusion of the sixty days.

Very truly yours,



Edan Rotenberg Esq.
Nicholas W. Tapert, Esq.
Super Law Group, LLC

cc:

Andrew Wheeler, Acting Administrator
Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Alexandra Dunn, EPA Region 1 Administrator
Environmental Protection Agency
5 Post Office Square – Suite 100
Boston, MA 02109-3912

Corporation Service Company
251 Little Falls Drive
Wilmington, DE 19808

Corporation Service Company
c/o O Kay Comendul
107 Selden Street
Berlin, CT 06037

[43] 40 C.F.R. § 135.3(a).

SUPER LAW GROUP, LLC

December 21, 2018

Via Certified Mail, Return Receipt Requested

Robert R. Scott, Commissioner
New Hampshire Department of Environmental Services
PO Box 95
Concord, New Hampshire 03302-0095

Re: Notice of Violation and Intent to File Suit under the Clean Water Act

Commissioner Scott:

We write on behalf of the Sierra Club, Inc., and Conservation Law Foundation, Inc., to notify you that on November 1, 2018, we sent a letter of intent to file suit against Granite Shore Power LLC, GSP Merrimack LLC, and Public Service Company of New Hampshire d/b/a Eversource Energy, pursuant to Section 505(a) of the federal Clean Water Act, stemming from these companies' ownership and operation of the Merrimack Power Station. That letter is attached, and thus we hereby notify the New Hampshire Department of Environmental Services of our intent to file suit in the United States District Court for the District of New Hampshire, no earlier than 60 days from the postmark of this letter.

Very truly yours,

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